# APPENDIX B STATEMENT OF WORK FOR SNS CABINET FABRICATION

SNS-109010200-SW0001-R00

Statement of Work for SNS Cabinet Fabrication

Draft May 23, 2001

**June 2001** 



II.S. Department of Energy Multilaboratory Project

## Statement of Work for SNS Cabinet Fabrication

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Date Published: June 2001

Prepared for the U.S. Department of Energy Office of Science

#### UT-BATTELLE, LLC

managing

Spallation Neutron Source activities at

Argonne National Laboratory Brookhaven National Laboratory

Thomas Jefferson National Accelerator Facility

Lawrence Berkeley National Laboratory

Los Alamos National Laboratory Oak Ridge National Laboratory

under contract DE-AC05-00OR22725

for the

U.S. DEPARTMENT OF ENERGY

#### Statement of Work (SOW) for SNS Rack Fabrication

The work to be performed involves all aspects of cabinet fabrication. It is expected that work will be performed on over 300 - 19 inch instrument racks over the time period of October 1, 2001 to March 2004.

Detailed requirements will be presented in task orders for each type of cabinet. SNS is a multi-laboratory construction project and thus requirements and equipment will be provided by any of six laboratories and/or the project office located in Oak Ridge. Task orders will include the following:

- a) the quantity of cabinets, lead engineer, needed delivery dates and other pertinent data
- b) definition of items to be procured, installed, and tested by the rack fabricator and what will be provided by others (SNS, laboratories, equipment suppliers, etc.).
- c) build-to-print design packages that contain specifications, drawings, installation instructions, test requirements, and all other needed technical data

The scope of work in each task order will include some (rarely all) of the following cabinet fabrication activities:

- a) Shop drawings Very little work in this area is expected. The build-to-print design packages are expected to contain all data needed for fabrication.
- b) Procurement and Assembly of cabinets and Accessories Procurement will be via the project Basic Ordering Agreement (BOA) #400000028 with APW Enclosure Products. The BOA provides cabinet frames, panels, walls, doors, ground bus bars, power strips, fans, and other items. APW's complete line of parts is available under this BOA.
- c) Wiring It is expected that the rack fabricator will procure, install, and terminate nearly all cabinet wiring.
- d) Painting Only touch up painting to repair damage will be needed. Fabrication and installation of nametags will be required in some cases. The project standard for painting is as follows:
- e) Metal surfaces shall be powder coated with APW standard Royal Blue, code E, textured finish. The closest color match by Federal Standard is #25183. However, for an exact color match the paint may be purchased from Cardinal Manufacturing (phone #213-283-9335 El Monte, CA) with the following numbers:

Powder: C241-BL-13 Wet paint: 8103-5147 Aerosol (touch up): A2003-5147

- f) Graphics Almost no graphics is expected to be needed on panels.
- g) Procurement of Electronics equipment It is expected that most electronic equipment will be furnished by others. Where equipment is to be procured by the rack fabricator, sufficient ordering information will be included in the task order design package. The rack fabricator will not be required to perform bid and award activities only procurement of specified equipment.
- h) Installation of Electronic equipment This is expected to vary greatly from task order to task order.

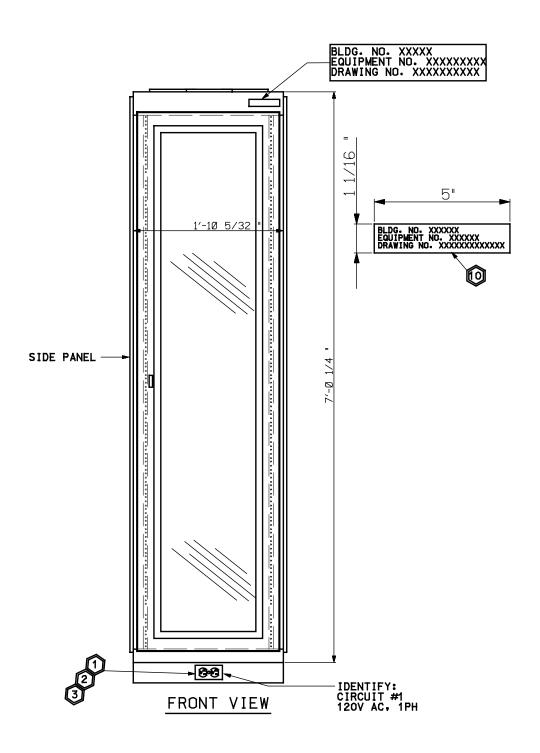
- i) Testing It is expected that the rack fabricator will perform inspections, continuity tests, and other testing to confirm his work on nearly all cabinets. Additional testing may be specified in the task order.
- j) Acceptance Acceptance will occur at the rack fabricator facility after inspections and tests are witnessed by SNS and/or laboratory personnel as specified in the task order.
- k) Storage No storage of cabinets after completion and acceptance of work will be needed.
- 1) Shipment The shipping destination will the SNS Receiving, Assembly, Testing, Storage (RATS) building or the SNS site.

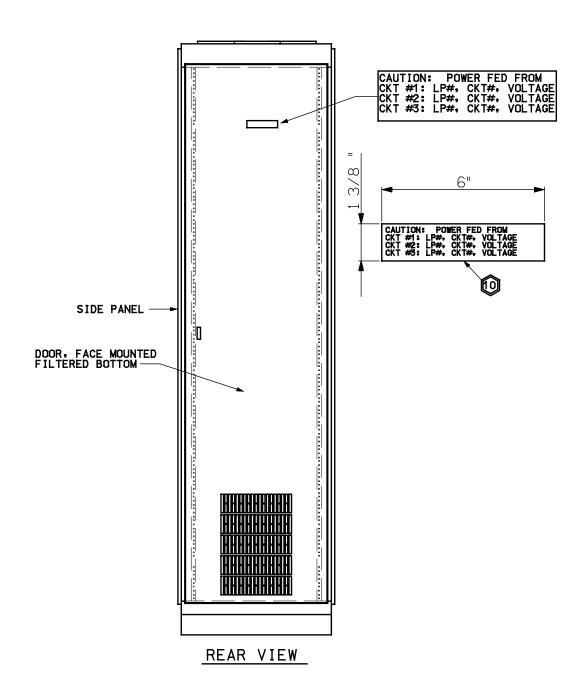
Features expected to be common to most rack assemblies are shown in Appendix A. Where conflicts exist between task order design packages and Appendix A, the task order design packages shall take precedence.

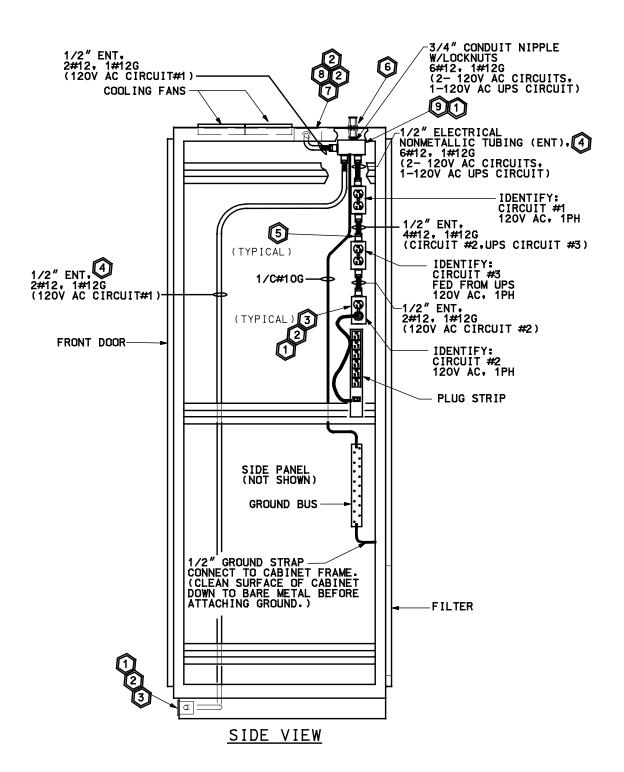
**Appendix A Common Features of Most Racks** 

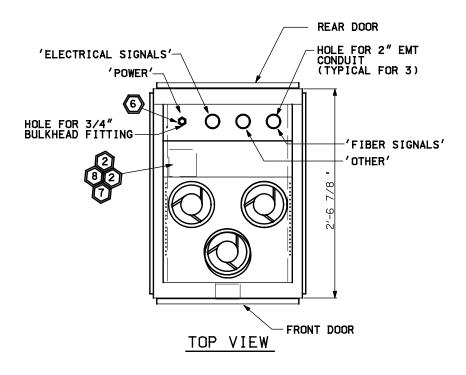
# Rack Sizes Standard Rack Sizes 8/24/01

	Rail-to-Rail		Footprint - no sides or doors		Footprint - sides & doors	
BOA Cabinet Versions	Width	Depth	Width	Depth	Width	Depth
25 inch depth	19.22	24.25	22.50	25.50	23.50	28.00
30 inch depth	19.22	29.50	22.50	30.75	23.50	33.25
36 inch depth	19.22	35.00	22.50	36.13	23.50	38.63









### EQUIPMENT LIST

- UTILITY BOX, 4-1/8" X 2-1/2" X 2-1/8" DEEP, 1/2" KNOCKOUTS, STEEL CITY CAT. NO. 58371-1/2.
- RECEPTACLE, DUPLEX, 20 AMP., 125VAC, NEMA 5-20R, HEAVY DUTY, SPECIFICATION GRADE, IVORY, HUBBELL NO. HBL5362GY.
- (3) COVER PLATE, DUPLEX RECEPTACLE, UTILITY BOX, STEEL CITY NO. 68-C-7.
- ELECTRICAL NONMETALLIC TUBING (ENT), 1/2", 0.840" 0.D., FOR POWER WIRING, STANDARD CARLON BLUE, 10 FOOT LENGTH, CARLON #12005-010.
- BOX CONNECTOR, 1/2", THREADED MALE ADAPTER, QUICK CONNECT, FOR USE WITH FLEX-PLUS BLUE ENT (ELECTRICAL NONMETALLIC TUBING, CARLON #A243D.
- BULKHEAD FITTING, RIGID, & INTERMEDIATE METAL CONDUIT, 3/4", THOMAS & BETTS HO75TBF.
- BOX. 4" SQUARE. 2-1/8" DEEP, WITH CONDUIT KNOCKOUTS. STEEL CITY NO. 2G4D-1/2 & 3/4.
- 8 COVER PLATE, TWO DUPLEX RECEPTACLES, 2 GANG, 4" SQUARE BOX, STEEL CITY #RS-8.
- (9) COVER PLATE, BLANK, UTILITY BOX, STEEL CITY NO. 68-C-1.
- NAMEPLATE, WHITE LAMICOID WITH BLACK CORE, 3/16" BLACK LETTERING, WITH 1/8" SPACING BETWEEN LINES, SIZED AS NOTED.